

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



1/10

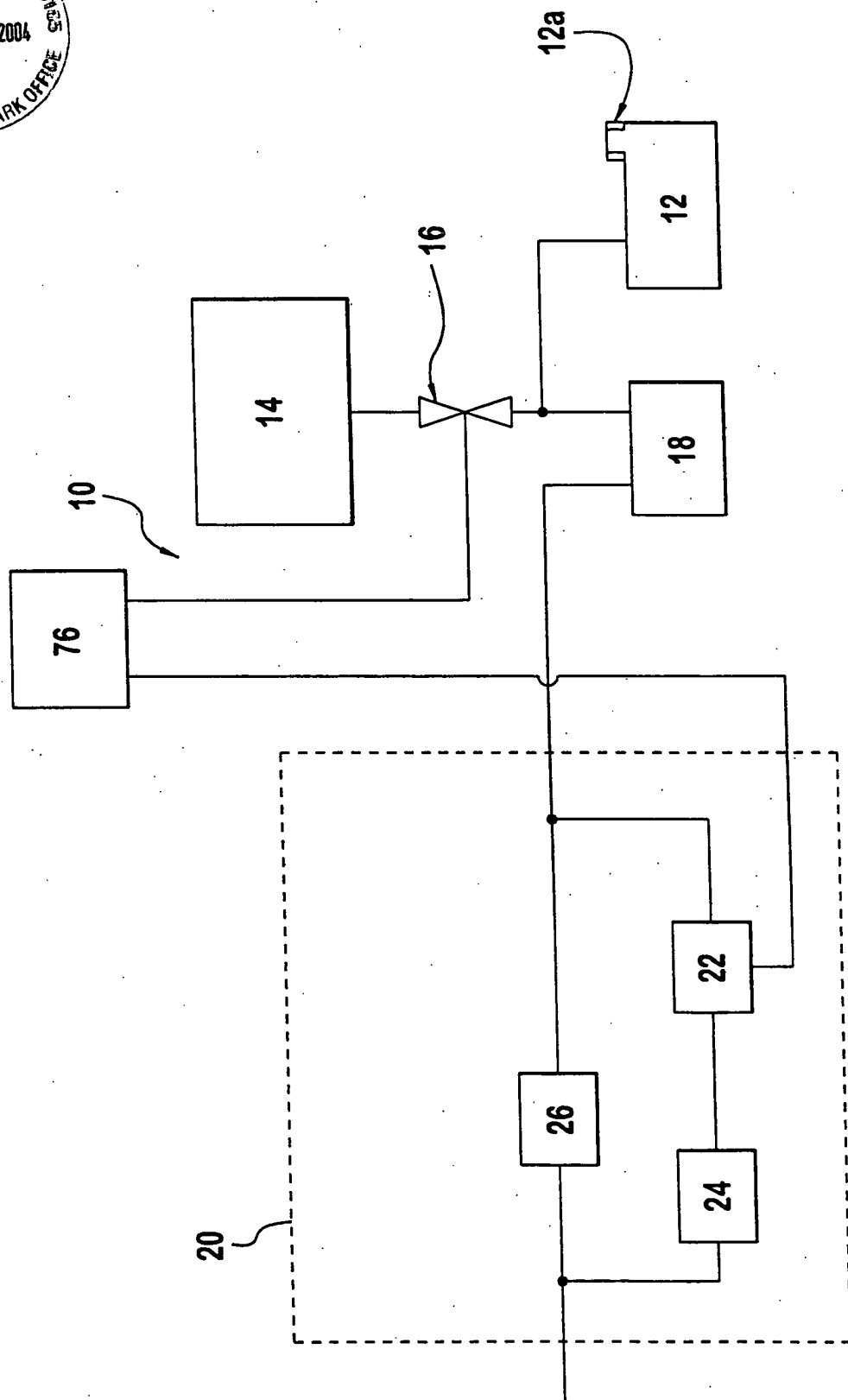


FIG. 1

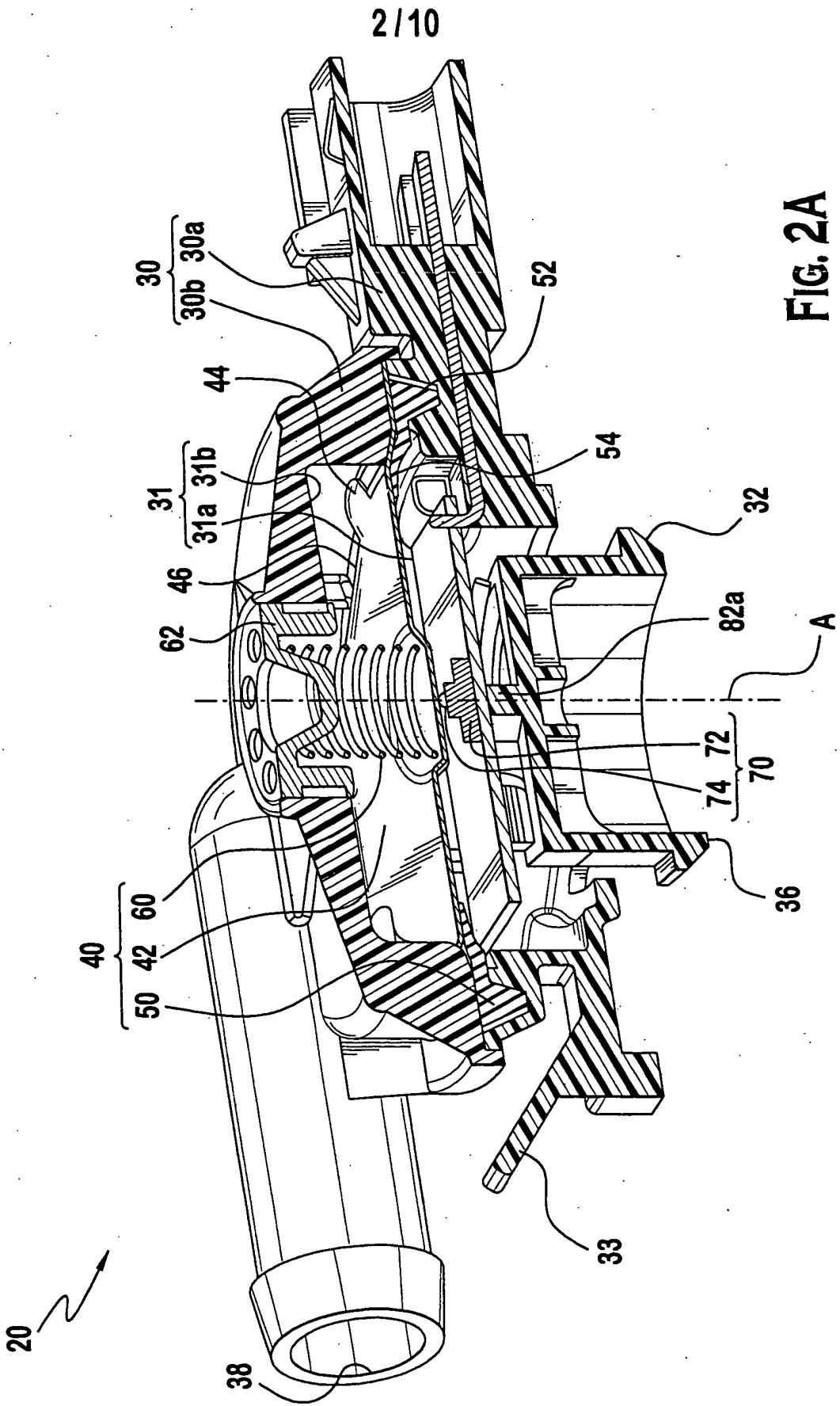
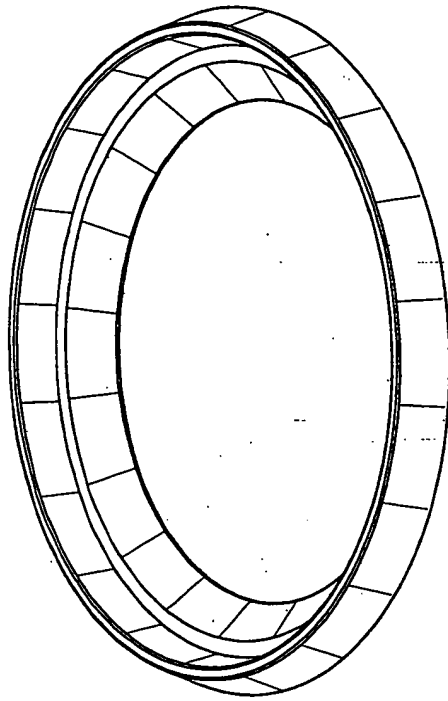
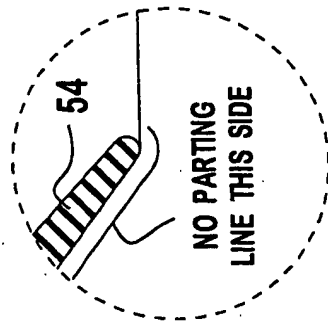


FIG. 2B



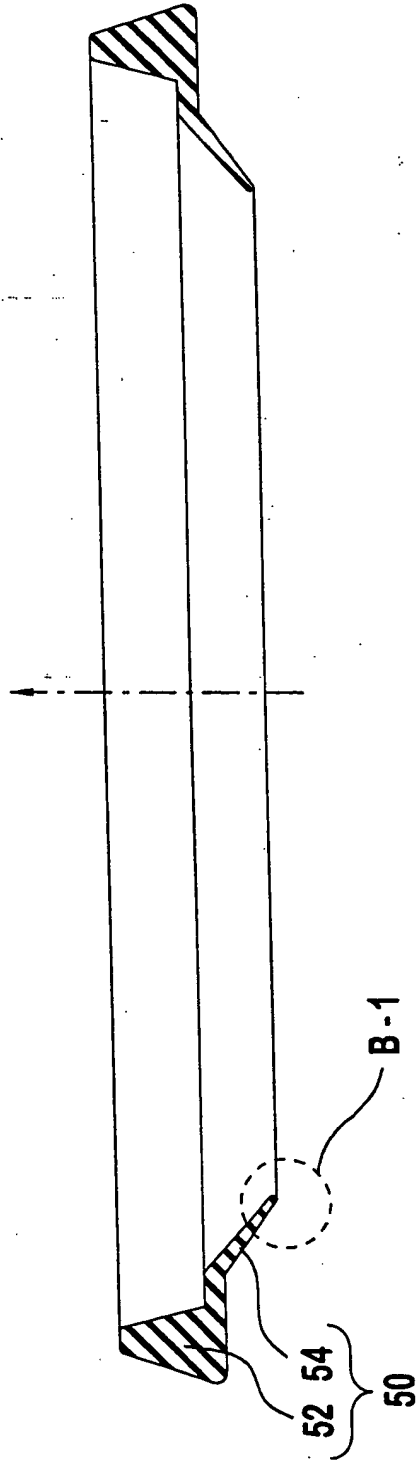
50



54

NO PARTING
LINE THIS SIDE

DETAIL B-1



52 54

50

B-1

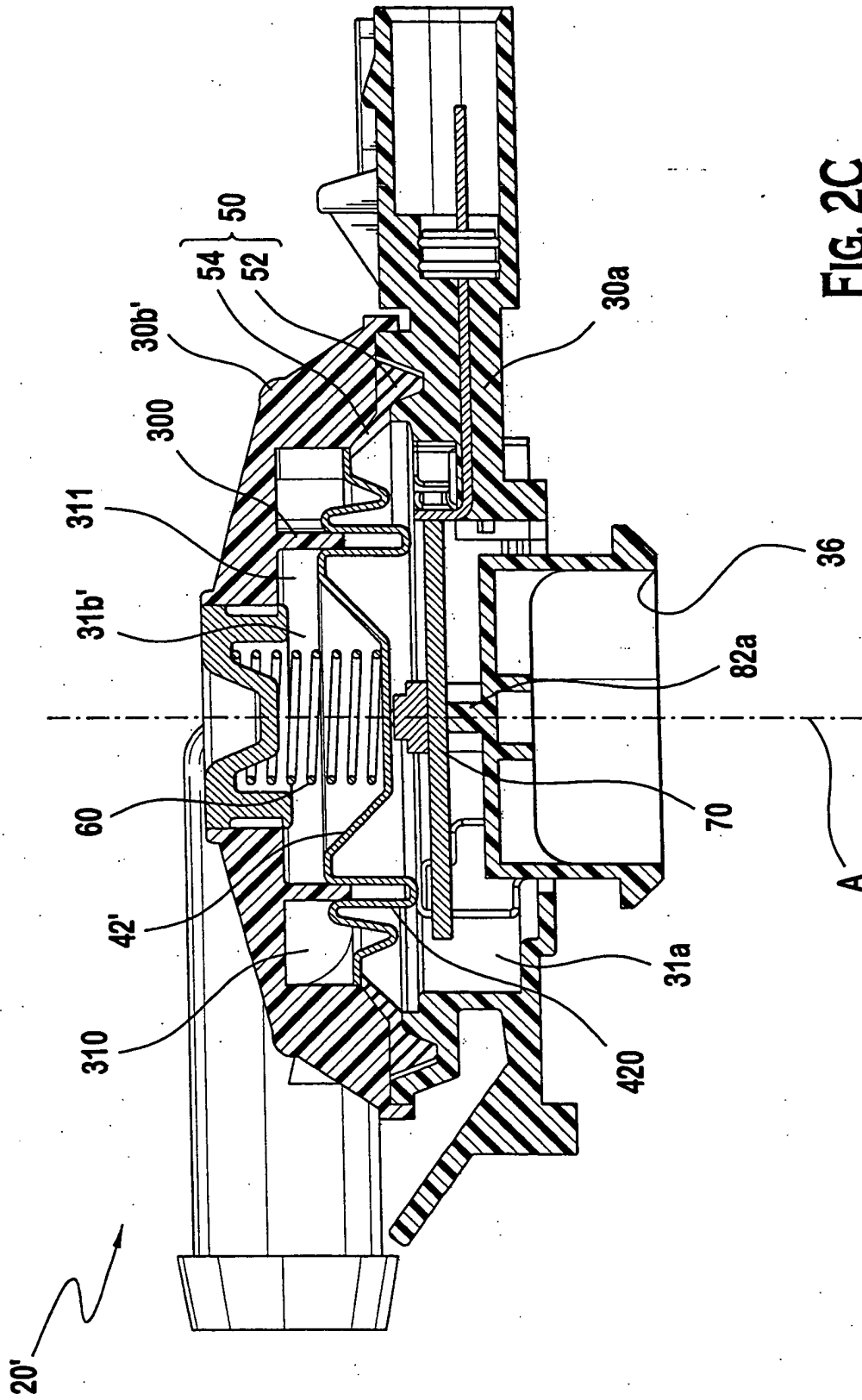


FIG. 2C

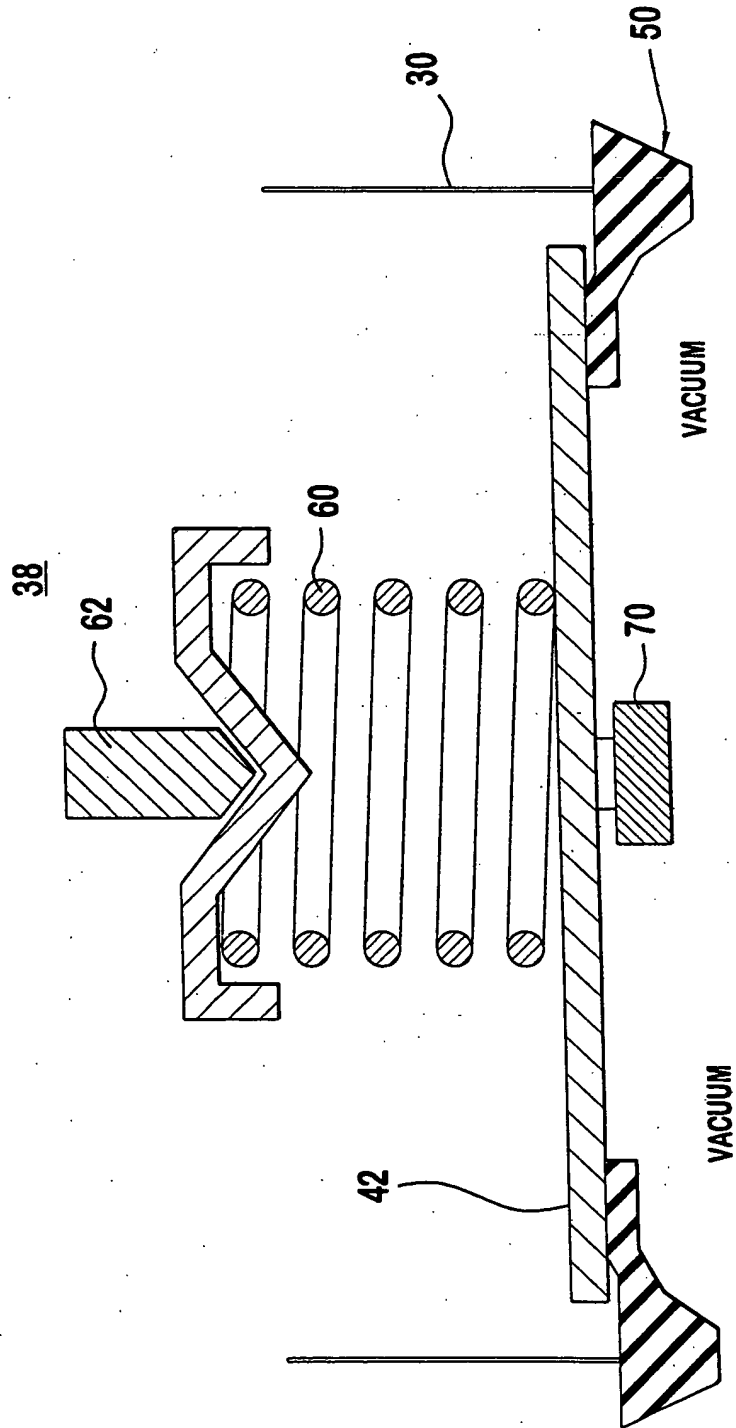


FIG. 3A

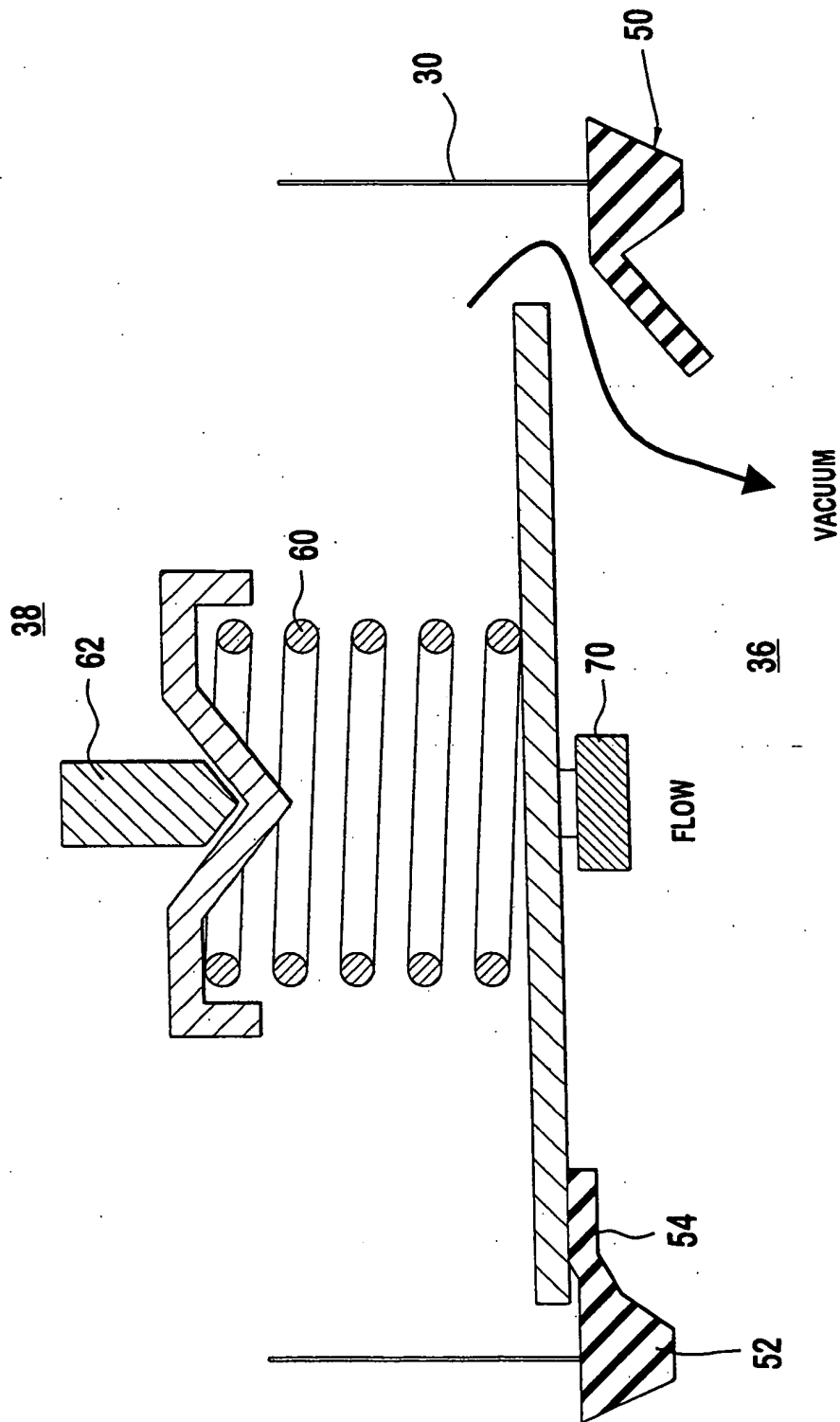


FIG. 3B

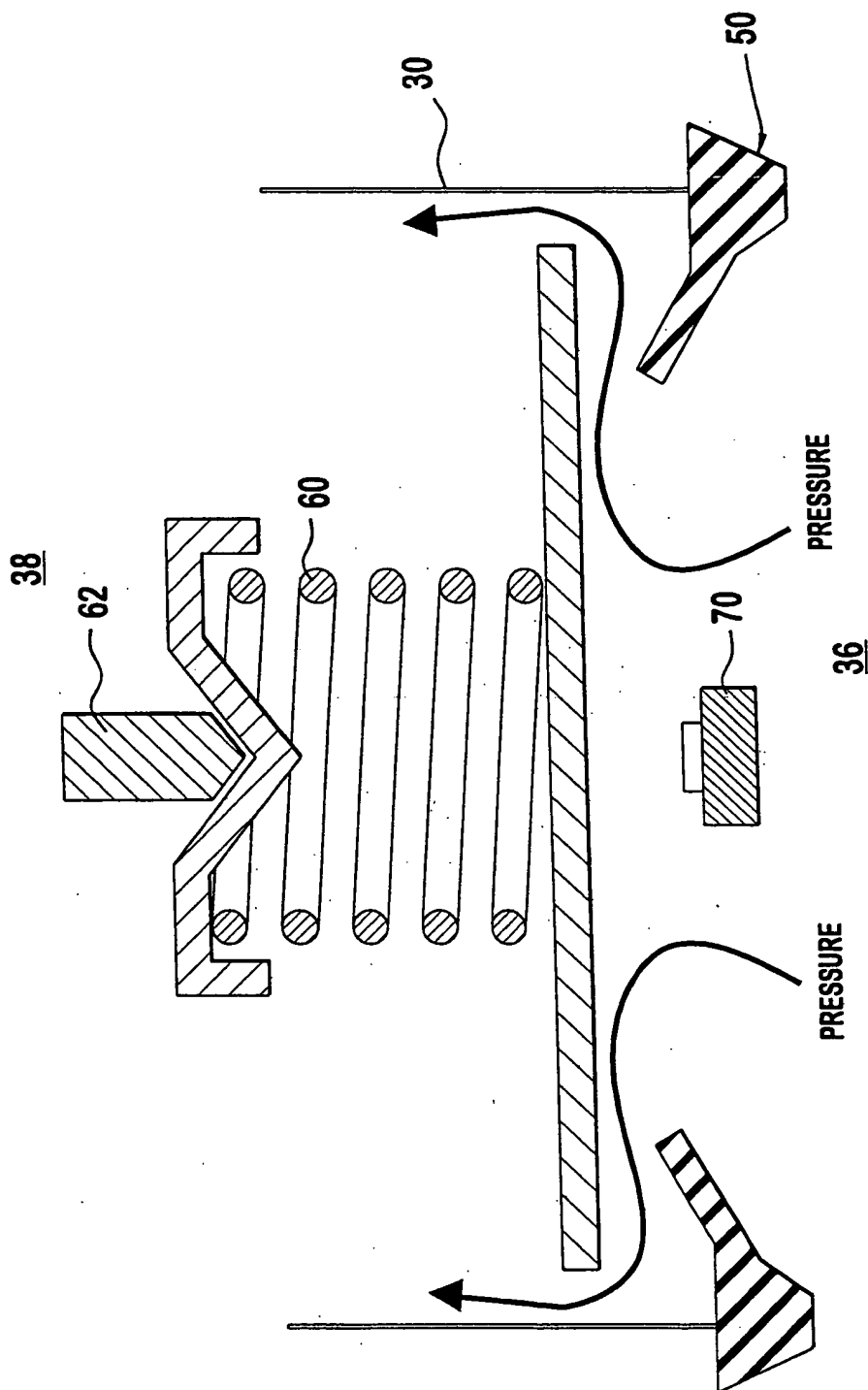


FIG. 3C

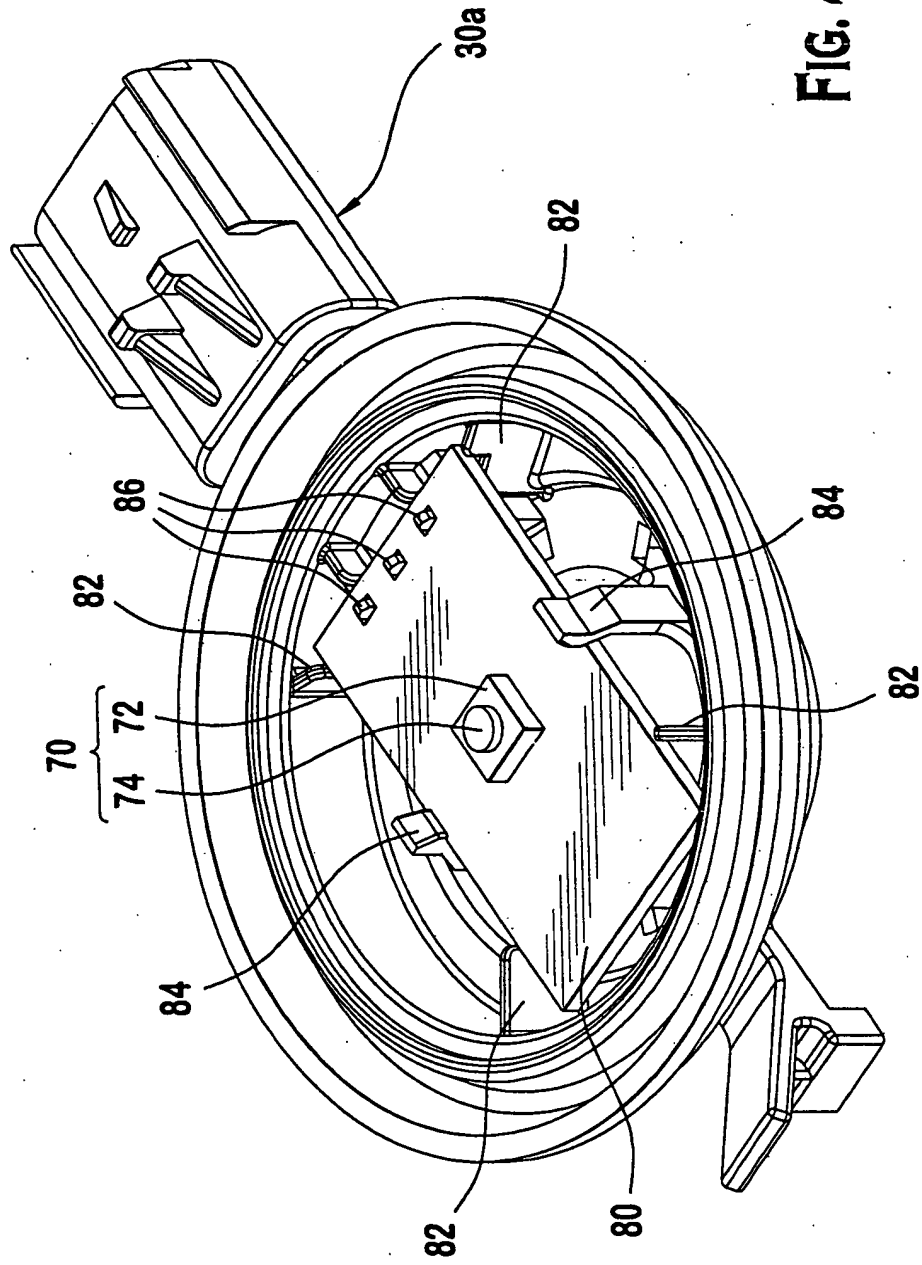


FIG. 4

FIG. 5A

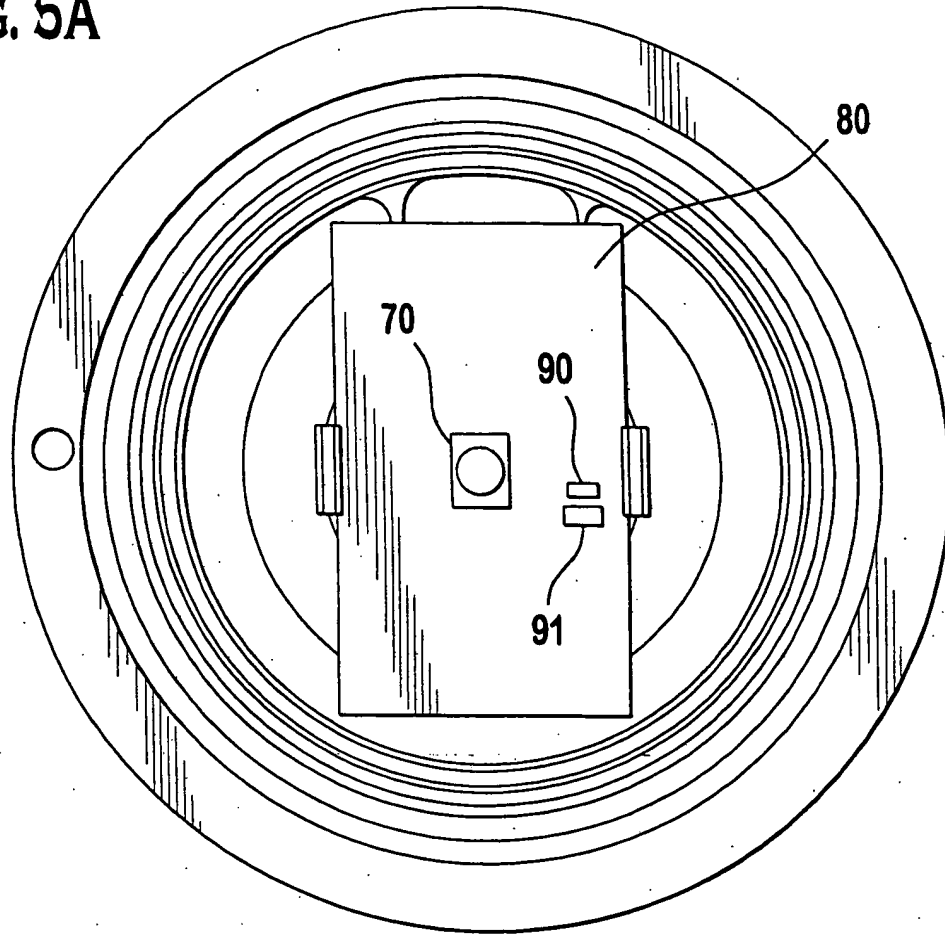


FIG. 5B

STEP CHANGE IN FLOW: 0-80 SLPM
AMBIENT TEMPERATURE: 20 DEGREES C
HEATING RESISTOR: 100% PWM

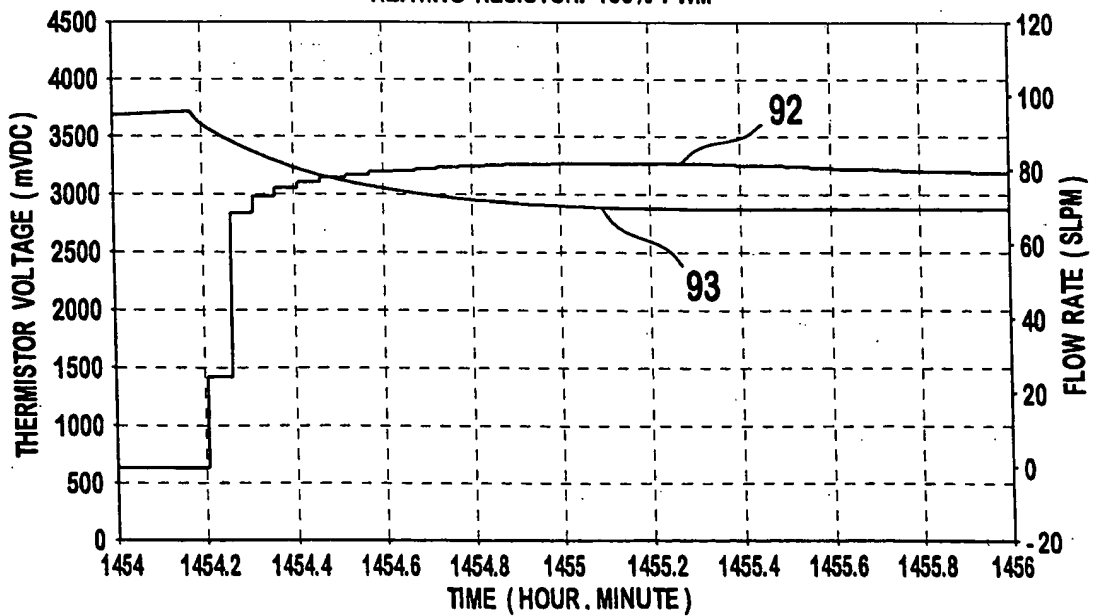


FIG. 5C

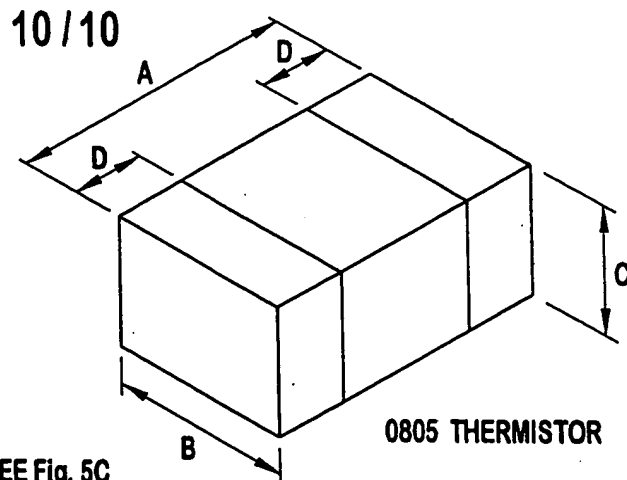


TABLE 5C

0805 STANDARD DIMENSIONS (mm) - SEE Fig. 5C

	AVERAGE	LARGEST	SMALLEST
A	2	2.2	1.8
B	1.25	1.45	1.05
C	0.9	1.1	0.7
D	0.5	0.8	0.2
A - (2xD)	1	1.8	0.2

TABLE 5D

CALCULATIONS:

*USING AVERAGE DIMENSIONS

MATERIAL	RESISTIVITY (Ohm*m)	WIDTH (meters)	WIDTH (mils)	HEIGHT (meters)	HEIGHT (ounce)
COPPER	1.68E - 08	0.001	39.37007874	6.82498E-05	2
NICKEL	6.99E - 08	0.001	39.37007874	6.82498E-05	2
GOLD	2.21E - 08	0.001	39.37007874	6.82498E-05	2

AREA (m^2)	LENGTH (inches)	LENGTH (meters)	RESISTANCE (ohms)	CURRENT (Amps)	POWER (Watts = J/s)
6.82498E-08	0.5	0.0127	0.003126163	2	0.012504652
6.82498E-08	0.5	0.0127	0.013007071	2	0.052028284
6.82498E-08	0.5	0.0127	0.004112393	2	0.016449572

TABLE 5E

CALCULATIONS:

*RESISTIVITY = 260Ω/cm²

DIMENSIONS	LENGTH = A - (2xD) (mm)	WIDTH = b (mm)	AREA (mm^2)	AREA (cm^2)
AVERAGE	1	1.25	1.25	0.0125
LARGEST	1.8	1.45	2.61	0.0261
SMALLEST	0.2	1.05	0.21	0.0021

RESISTANCE (ohms)	CURRENT (A)	POWER (W = J/s)
3.25	1	3.25
6.786	1	6.786
0.546	1	0.546